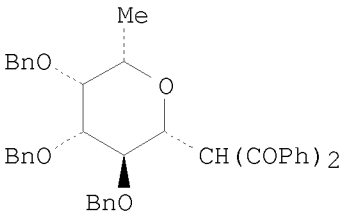
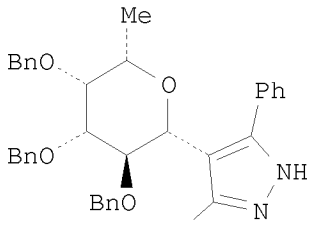
=> d l6 ibib abs 1-5

L6 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:108968 CAPLUS <<LOGINID::20080213>>
DOCUMENT NUMBER: 144:331652
TITLE: Sc(OTf)3-catalyzed C-glycosylation of β-diketones. A facile access to useful precursors of *heteroaromatic C-glycosides*
AUTHOR(S): Yamauchi, Takahito; Shigeta, Masayuki; Matsumoto, Takashi; Suzuki, Keisuke
CORPORATE SOURCE: Department of Chemistry, Tokyo Institute of Technology, JST-Agency, 2-12-1, Ookayama, Meguro-ku, Tokyo, 152-8551, Japan
SOURCE: Heterocycles (2005), 66, 153-160
CODEN: HTCYAM; ISSN: 0385-5414
PUBLISHER: Japan Institute of Heterocyclic Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 144:331652
GI



I



II

AB Scandium triflate efficiently catalyzes C-glycosylation of β-diketones with glycosyl acetate. Elaboration of cyclization of the β-diketo moiety in the resulting *C-glycosides*, e.g. I, to heterocycles provides a flexible route to the C-nucleoside analogs, e.g. II.
REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2002:585160 CAPLUS <<LOGINID::20080213>>
DOCUMENT NUMBER: 138:39469
TITLE: One-pot synthesis of C-glycosylic compounds (*C-glycosides*) from D-glucal, p-tolylsulfenyl chloride and aromatic/*heteroaromatic* compounds in the presence of Lewis acids
AUTHOR(S): Koikov, Leonid N.; Smoliakova, Irina P.; Liu, Hui
CORPORATE SOURCE: Chemistry Department, University of North Dakota, Grand Forks, ND, 58202-9024, USA
SOURCE: Carbohydrate Research (2002), 337(14), 1275-1283
CODEN: CRBRAT; ISSN: 0008-6215
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

OTHER SOURCE(S): CASREACT 138:39469

AB In the presence of Zn(CN)2, benzylated 2-thio-2-S-(p-tolyl)pyranosyl chlorides (I) generated in situ from tri-O-benzyl-D-glucal and p-TolSCl, smoothly react with thiophene, 2-methylthiophene, furan, 2-methylfuran, and N-methylpyrrole to give heteroaryl 2-thio-2-S-(p-tolyl)-C-β-D-glucopyranosylic compds. in good yields. Upon treatment with SnCl4, the reaction of chlorides I with thiophene or 1,4-dimethoxybenzene provides the corresponding benzylated C-β-D-glucofuranosylic derivs. Under the same conditions, the use of 2-methylthiophene, furan, 2-methylfuran, or N-methylpyrrole yields (2S,3R,4R,5S)-1,3,4-tribenzyloxy-6,6-diheteroaryl-5-(p-tolylthio)-2-hexanoles. Treatment of I and mesitylene with AgBF4 yielded 1,6-anhydro-3,4-di-O-benzyl-2-thio-2-S-(p-tolyl)-β-D-glucose.

REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:149709 CAPLUS <<LOGINID::20080213>>

DOCUMENT NUMBER: 137:20514

TITLE: InCl3-catalyzed stereoselective synthesis of C-glycosyl *heteroaromatics*

AUTHOR(S): Yadav, J. S.; Reddy, B. V. S.; Raman, J. V.; Niranjan, N.; Kiran Kumar, S.; Kunwar, A. C.

CORPORATE SOURCE: Division of Organic Chemistry, Indian Institute of Chemical Technology, Hyderabad, 500007, India

SOURCE: Tetrahedron Letters (2002), 43(11), 2095-2098
CODEN: TELEAY; ISSN: 0040-4039

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 137:20514

AB Glycals react smoothly with furan in the presence of a catalytic amount of indium trichloride at ambient temperature to afford predominantly the C-3-substituted glycals in high yields. Other *heteroaroms.* including 2-benzyloxymethylfuran, thiophene and N-Boc protected indole afford exclusively C-1-glycosides in good yields with high β-selectivity under similar reaction conditions.

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:460849 CAPLUS <<LOGINID::20080213>>

DOCUMENT NUMBER: 133:222885

TITLE: Synthesis of C-glycosylic compounds using three-membered cyclic intermediates

AUTHOR(S): Smoliakova, Irina P.

CORPORATE SOURCE: Chemistry Department, University of North Dakota, Grand Forks, ND, 58202-9024, USA

SOURCE: Current Organic Chemistry (2000), 4(6), 589-608
CODEN: CORCFE; ISSN: 1385-2728

PUBLISHER: Bentham Science Publishers

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review with 59 refs. on numerous methods for preparation of C-glycosylic compds. (*C-glycosides*). One general approach to the synthesis of these important O-glycoside analogs is based on the use of three-membered cyclic intermediates. The review is focused on the application of glycal and exo-glycal derived epoxides and episulfonium and

iodonium ions for preparation of *C-glycosides.* Reactions of glycal epoxides with organocuprates, Grignard and organolithium reagents, allylsilane, sodio malonate, and lithium alkynyl derivs. have been shown to be convenient for stereoselective synthesis of both α- and β- *C-glycosides.* The unprotected C(2)-hydroxyl group in the products can be removed in two steps providing an easy excess to 2-deoxy-*C-glycosides.* Electrophilic addition of arylsulfenyl chloride (ArSCl) to glycals has afforded 2-(arylthio)pyranosyl chlorides. Upon the treatment with a Lewis acid, the chlorides have been converted to episulfonium-like intermediates. Reactions of the latter species with silyl enol ethers, TMSCN, allylsilanes, vinyl ethers, and *heteroarom.* compds. have opened a new synthetic route to 2-(arylthio)-β- *C-glycosides* having a variety of functional groups in the lateral chain. The 2-arylthio group in the products can be selectively removed using Raney Ni or n-Bu3SnH/AIBN. Episulfonium ions generated from ArSCl adducts of 1-methylene sugars have reacted with O- and C-nucleophiles to afford O-ketopyranosides and 1,1-dialkyl *C-glycosides,* resp. Acid catalyzed and nucleophilic ring openings of spiro epoxides obtained from exo-glycals have occurred with opposite stereoselectivity. Iodonium-promoted reactions of exo-glycals have led to O-ketopyranoside derivs.

REFERENCE COUNT: 159 THERE ARE 159 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1999:298378 CAPLUS <<LOGINID::20080213>>
DOCUMENT NUMBER: 131:19242
TITLE: Preparation of C-glycosylated aryltin compounds
INVENTOR(S): Sato, Susumu; Kurihayashi, Takeshi
PATENT ASSIGNEE(S): Sankyo Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11124392	A	19990511	JP 1997-288847	19971021

PRIORITY APPLN. INFO.: JP 1997-288847 19971021
OTHER SOURCE(S): MARPAT 131:19242
GI For diagram(s), see printed CA Issue.
AB The title compds. I [Ar = aromatic or *heteroarom.* ring; R1 = H, halo, (un)protected OH, cyano, (un)protected amino, CO2H, CH2CO2H, C1-10 alkyl, lower alkoxy; R2 = lower alkyl, Ph; R3 = sugar residue Q, Q1 [R4 = H, OH-protecting group; R5 = H, acyl; R6 = H, Me, (un)protected CH2OH, CO2H; p = 1-4; q = 0-1]; m = 1-4; n = 1-3] except an anthracene derivative II are prepared I are useful as intermediates for aryl *C-glycosides* which inhibit glycoconjugate- or oligosaccharide-mediated cell-cell, cell-matrix, and cell-virus interactions, etc. and used to treat disorders caused by such the interactions. A CH2Cl2 solution of tetra-O-acetyl-L-fucose, CF3CO2Ag, and p-C6H4(OMe)2 was treated with a CH2Cl2 solution of SnCl4 at 0° for a day to give 54.5% 1,4-dimethoxy-2-(2,3,4-tri-O-acetyl-β-L-fucopyranosyl)benzene, which was brominated with Br2 to give 66% 5-bromo-1,4-dimethoxy-2-(2,3,4-tri-O-

acetyl-β-L-fucopyranosyl)benzene. A mixture of the brominated product, Pd(PPh3)4, K2CO3, and toluene was treated with Bu3SnSnBu3 under reflux for 10 h to give 77% 1,4-dimethoxy-2-(2,3,4-tri-O-acetyl-β-L-fucopyranosyl)-5-(tri-n-butylstannyl)benzene.

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=> d his

     (FILE 'HOME' ENTERED AT 14:49:21 ON 13 FEB 2008)

     FILE 'REGISTRY' ENTERED AT 14:49:31 ON 13 FEB 2008
L1             STRUCTURE UPLOADED
L2           0 S L1 SSS SAM
L3           0 S L1 SSS FULL

     FILE 'CAPLUS' ENTERED AT 15:29:48 ON 13 FEB 2008
L4        2059 S C-GLYCOSIDE
L5           0 S L4 AND BENZOTHIOPHENE
L6           5 S L4 AND HETEROAROMATIC
L7           5 S L6 AND PY<=2005

=> logoff hold
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FULL ESTIMATED COST                                 26.59     205.16

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)      SINCE FILE      TOTAL
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CA SUBSCRIBER PRICE                                 -4.00      -4.00

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STN INTERNATIONAL SESSION SUSPENDED AT 15:31:23 ON 13 FEB 2008
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